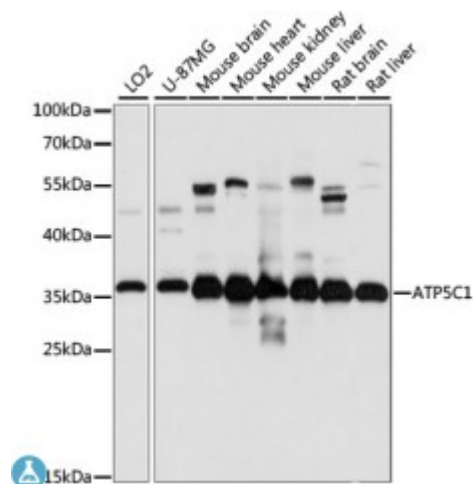


Anti-ATP5C1 Antibody



Description

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F₁, and the membrane-spanning component, F_o, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the gamma subunit of the catalytic core. Alternatively spliced transcript variants encoding different isoforms have been identified. This gene also has a pseudogene on chromosome 14.

Model	STJ117452
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 26-298 of human ATP5C1 (NP_001001973.1).
Gene ID	509
Gene Symbol	ATP5C1
Dilution range	WB 1:200 - 1:2000
Tissue Specificity	Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply, Isoform Liver is expressed in the brain, liver and

kidney, Isoform Heart and Isoform Liver are expressed in the skin, intestine, stomach and aorta

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	ATP synthase subunit gamma mitochondrial F-ATPase gamma subunit
Molecular Weight	32.996 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:833OMIM:108729Reactome:R-HSA-163210
Alternative Names	ATP synthase subunit gamma mitochondrial F-ATPase gamma subunit
Function	Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain, F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk, During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation, Part of the complex F(1) domain and the central stalk which is part of the complex rotary element, The gamma subunit protrudes into the catalytic domain formed of alpha(3)beta(3), Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits
Cellular Localization	Mitochondrion, Mitochondrion inner membrane